## **REMARKS**

Claims 6-10 and 19 were objected to for depending from a rejected base claim. These claims have each been re-written in independent form, and should be in condition for allowance.

Claims 1 and 11-16 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,385,460 B1 (Wan) in view of U.S. 6,259,927 B1 (Butovitsch et al.). Claims 2-5 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Wan in view of Butovitsch et al., and further in view of U.S. Patent 6,522,888 B1 (Garceran et al.). Claims 17, 18 and 20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Garceran et al. in view of Wan and further in view of Butovitsch et al. These rejections are respectfully disagreed with, and are traversed below.

The arguments made previously regarding Wan are repeated and incorporated herein by reference.

The inventors have reviewed the U.S. Patents that were cited and relied upon by the Examiner, and note the following salient points.

Wan does not disclose any "forgetting factor", contrary to the Examiner's assertion that he does (see, for example, the Examiner's Response to Arguments in the most recent office action). Reference is made by the Examiner to Wan at col.10, lines 27-31, where a "multiplier factor" is disclosed. The "multiplier factor" of Wan has nothing to do with a "forgetting factor" (apart from being a number). The "multiplier factor" is used instead to determine a scanning rate based on an initial scanning rate, as is also depicted in Figure 8 of Wan. The scanning rate is used to determine how often the mobile station is to scan for neighboring cells.

In contradistinction, the "forgetting factor" as employed in this invention is used for filtering purposes. The forgetting factor determines the filter length. Basically, it is used to indicate how

much of "old" measurements should be considered in the calculation of a measurement report. A measurement report is computed for or by the filter based on the latest measurements made, as well as on some number of previous "old" measurements, as determined by the value of the "forgetting factor".

It is therefore clear that the "multiplier factor" taught by Wan and the "forgetting factor" as taught and claimed by this invention are very different in nature, and serve completely different purposes.

Further, Wan teaches a method for measuring signal quality from neighbouring cells in the mobile station, which signal quality is expressed through a combination of a variety of indicators (col.7, lines 28-34). Col.7, lines 23-26, states that the signal quality (from a neighbouring cell) is averaged in order to overcome the influence of various factors on the measured signal quality. However, Wan fails to disclose how this averaging is performed.

Therefore, the inventors assert that Wan does not provide disclosure as to "calculating in the ME an indication of link quality, the calculation employing a filtering operation having a filter length that is a function of the determined parameter", where as in claim 1 of the instant patent application this parameter is "indicative of a signal quality experienced by the ME").

As was argued in the first response, Wan appears to simply determine MS speed in order to vary the frequency of scanning neighbor cells (e.g., at low speeds decrease the scanning frequency in an attempt to save battery power). In fact, neither of the words "filtering" or "filter" appears in the Wan patent. The word "length" does appear, but in the context of the length, i.e., the duration, of a time slot (see col. 5, line 63 to col. 6, line 2).

Butovitsch et al. disclose reporting link quality to the wireless network by the mobile terminal, but fail as well to disclose the subject matter recited in claim 1.

Art Unit: 2681

This being the case, the Examiner's proposed combination of Wan and Butovitsch et al. does not

disclose or suggest the subject matter claimed in claim 1, and therefore claim 1, and all claims

that depend from claim 1, should be found to allowable over the proposed combination of Wan

and Butovitsch et al.

With specific regard to dependent claims 11-14, the misunderstanding of the Examiner with

regard to the "forgetting factor" versus the "multiplier factor", as explained above, serves to

undermine his rejection of these claims.

With specific regard to dependent claim 15, the basis for the rejection is not understood. The fact

that Wan refers to mobile station speed (in the very different context that the mobile station speed

may influence the scanning rate) is insufficient grounds for rejecting claim 15, as claim 15 further

modifies the calculation performed by claim 1.

With specific regard to dependent claim 16, the basis for the rejection is also not understood.

Claim 16 refers to the step of calculating operating on "a plurality of measurements of one of a

mean Bit Error Probability (BEP) or a coefficient of variation of a Bit Error Probability

(cv)(BEP)". That portion of Wan referred to by the Examiner appears to simply mention "bit

error rate" as an indicator of RX quality.

Turning now to Garceran et al., they disclose (col.10, lines 52-56) that the mobile station's

location, together with its speed and/or direction, can influence the selection of a particular

neighboring cell for handover.

Garceran et al. mention that "the speed and/or direction of the wireless unit can be included in

the location information" (col.10, lines 52-56). Col. 3, lines 56-67, states that this location

information can be sent by the mobile station, or determined by the network. Col. 10, lines 52-56,

teaches that the speed and/or direction of the wireless unit can be included in the location

information and be used by the MSC.

11

S.N. 09/457,952 Art Unit: 2681

However, Garceran et al. do not disclose that the location information is sent from the network

to the mobile unit, in contradistinction to the Examiner's statements with regard to col.9, lines

15-20. It should also be noted that Garceran et al. are concerned with sending the location

information from the wireless unit to the network. Col.9, lines 15-20, refers only to the network

sending, to the wireless unit, forward link channels to monitor at a particular location. This

portion of the reference does not refer to sending location information to wireless unit.

As such, it is clear that the Examiner's use of Garceran et al., in combination with the other

patents to Wan and Butovitsch et al., in rejecting claim 2 is inappropriate, and does not render

dependent claim 2 unpatentable.

Regarding the rejection of claim 3 (dependent on claim 2), none of the cited patents disclose the

method of claim 2, or claim 1 for that matter, and hence claim 3 is patentable. The same

reasoning applies to claims 4 and 5, whether or not the use of padding bits or a PACCH is

considered. However, further in this regard the Examiner is respectfully requested to provide a

reference that validates his assertion that "transmitting places the speed indication in padding bits

of a point-to-point message is well known in the art so that a system can detect a bit error of

message easily".

In view of the foregoing arguments, it should be clear that the Examiner's rejections of claims

17,18 and 20 are also not appropriate, and should be withdrawn.

Claim 17 refers in part to:

"receiver in said ME for receiving said transmitted speed indication; and a

processor in said ME for implementing <u>a filter for filtering a sequence of link</u> quality measurement data, said filter having a filter length that is a function of a parameter having a value that is a function of said received transmitted speed

indication; and a transmitter in said ME for transmitting an indication of said

filtered link quality measurement data to a receiver of said wireless network".

12

S.N. 09/457,952 Art Unit: 2681

Notwithstanding the comments of the Examiner, and his citations to various portions of the cited patents, it is submitted for the reasons argued above, that the proposed combination of patents does not expressly disclose or suggest at least the subject matter of the underlined text shown above, and thus cannot render claim 17 unpatentable. In that claim 17 is clearly patentable over Wan, then claim 18 is also clearly patentable over the proposed combination of these patents.

The same argument applies to claim 20, that recites in part:

"determining in the wireless network an indication of a signal quality experienced by individual ones of the plurality of ME;

transmitting the determined indications to individual ones of the ME using a point-to-point message;

in a particular one of the plurality of ME, receiving the transmitted indication;

using the received indication for setting a length of a filter that is employed in a filtering operation that operates on a sequence of link quality measurement data; and

transmitting a result of the filtering operation to the wireless network".

The Examiner is respectfully requested to reconsider and remove the rejections of claims 1-5, 11-18 and 20 under 35 U.S.C. 103(a), and to allow these claims as originally filed.

S.N. 09/457,952 Art Unit: 2681

Respectfully submitted:

Harry F. Smith

Reg. No.: 32,493

Customer No.: 29683

HARRINGTON & SMITH, LLP

4 Research Drive

Shelton, CT 06484-6212

Telephone:

(203)925-9400

Facsimile:

(203)944-0245

email:

hsmith@hspatent.com

## **CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313.

Date

Name of Person Making Peposit